

CURRICULUM VITAE

Personal data:

Name: Jing Qin

Title: Mathematical Statistician, Biostatistics Research Branch, National Institute of Allergy and Infectious Diseases (NIAID).

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Education:

Ph.D in Statistics, Nov, 1992. Univ. of Waterloo, Canada.

Sep. 1989 - Nov. 1992, Statistics Ph.D. Student, University of Waterloo.

Sep. 1988 - June 1989, Statistics major, University of California at Santa Barbara.

Sep. 1984 - July 1986: Statistics major, East China Normal Univ. Sep., 1987. M. S. degree.

Sep., 1978 - July, 1981: Mathematics major, Chong Qing Three Gorges College, P. R. China.

Employment:

Mathematical Statistician at National Institute of Allergy and Infectious Diseases (NIAID), from June, 2004 to now.

Assistant Attending Bio-statistician, Memorial Sloan-Kettering Cancer Center. Sep., 1999-June, 2004.

University of Maryland at College Park, Assistant Professor, August 17, 1994-August, 1999.

Adjunct assistant professor, Biostatistics department, Johns Hopkins University. Sept. 1997- May, 1999. Teaching Ph.D level probability course and conducting research in AIDS studies, case-control studies, truncation data problem, non-ignorable missing data problems and generalized linear models.

Visiting Professor in AT&T Newman research laboratory, from June to August, 1998. Conducting time series analysis on channel fading.

Visiting Biostatistics group in National Institute of Health, Heart, Lung and Blood Institute (NHLBI), from June to August, 1996.

Postdoctoral at Stanford University from Sep. 1, 1993-Aug. 15, 1994.

Postdoctoral at University of Waterloo, from Jan. 1, 1993-June 30, 1993.

Teaching assistant at the University of Waterloo, 1989-1992.

Awards:

Elected as an American Statistical Society Fellow, 2006.

Won the Pierre Robillard award in 1993 June. (The best thesis defended in Canada in 1992)

Awarded Natural Sciences and Engineering Research Council of Canada Postdoctoral Fellowship, 1993-1995.

Professional experience:

Joint Editor of *International Journal of Biostatistics*, April, 2011-2012 June.

Associate Editor of *Statistica Sinica* Sept. 2006- July, 2011.

Review National Science Foundation (NSF) proposals (Statistics and Economics), National Security Agency(NSA) proposals, Natural Sciences and Engineering Research Council of Canada Research Proposals, Research Grants Council of Hong Kong, United States and Israel Binational Science Foundation and Le Studium Project (France).

Referee for: *The American Journal of Epidemiology*; *The Annals of Statistics*; *Annals of Applied Statistics*; *Bernoulli*; *Biometrika*; *Biometrics*; *Biostatistics*; *Biometrical Journal*; *Bio-informatics*; *Journal of Virology*; *Journal of the American Statistical Association*; *Journal of the Royal Statistical Society, Series B and C*; *The Scandinavian Journal of Statistics*; *Statistica Sinica*; *Ann. Inst. Statist. Math.*; *Statistics in Medicine*, *Science in China, Series A: Mathematics*; *Statistics and Probability Letters*, *Statistica Neerlandica*, *Australian Journal of Statistics*, *Communications in Statistics (Simulations and Computation)*, *The Canadian Journal of Statistics*, *Computational Statistics and Data Analysis*; *Journal of*

Multivariate Analysis, Australian and New Zealand Journal of Statistics, Journal of Statistical Planning and Inference, Nonparametric Statistics, Forest Science, Life time data analysis, Journal of Clinical Oncology, Journal of Econometrics, Health Services and Outcomes Research Methodology, Journal of Computational and Graphical Statistics .

Two years statistical seminar organizer in University of Maryland (Sep. 1994-May, 1996).

Teaching empirical likelihood in Biostatistics Department at Johns Hopkins University from 2007-2011.

Invited talks:

Some aspects of semi-empirical likelihood. 225th IMS Meeting, Oct., 1992. University Park, Pennsylvania.

Semiparametric likelihood ratio confidence intervals for truncated data. Dept. of Biostatistics, Johns Hopkins University, Nov., 1994.

Empirical likelihood method for goodness of fit test and estimation in upgraded mixture models. Fifth Eugene Lukacs Symposium, Statistical Inference in semi-parametric models, Bowling Green, March, 1995.

Empirical likelihood in a semi-parametric model. York University, May 1995.

Semi-empirical likelihood ratio confidence intervals for mixture proportion. IMS Annual Meeting, Chicago, Aug., 1996.

A goodness of fit test for logistic regression models based on case-control data. Dept. of Statistics, Rutgers University, Nov., 1996.

Two sample densities ratio models and their applications in binary data. Iowa State University, March, 1997.

Empirical likelihood. Dept. of Biostatistics Johns Hopkins Univ., May, 1998.

Binary data, case-control study and non-ignorable missing data problem. Dept. of Statistics, Carnegie Mellon University, April 7, 1999.

Inferences for non-ignorable non-response survey data when the underlying model might be misspecified. ICSA 2000 applied statistics symposium. June 1-3, 2000, New Jersey.

Semiparametric likelihood based inference for non-ignorable nonresponse survey data. AMS-IMS-SIAM joint summer research conferences. Bayes frequentist and likelihood inference: A synthesis. July 9-13, 2000.

Information recovery in a study with surrogate endpoints. ICSA Statistical meeting, Hong Kong, 2001, August 16-19.

A mixture model approach for finding informative genes in microarray studies. The 30th Annual Meeting of the Statistical Society of Canada (SSC). Hamilton, Ontario, May 26-29, 2002.

Using a mixture model for finding informative genes in microarray studies. IMS/WNAR, Los Angeles, June 23-26, 2002.

Empirical likelihood, False discovery rates and microarray studies. IMS Annual Meeting, July 28-31, 2002, Banff, Canada.

The use of uncategorised data to improve estimation efficiency in mixture models via empirical likelihood. Joint statistical meeting, New York, August, 2002.

Using a mixture model for finding informative genes in microarray studies. Dept. of Statistics, University of Missouri at Columbia, Oct, 18, 2002.

Using a mixture model for finding informative genes in microarray studies. Dept. of Epidemiology and Biostatistics, University of Maryland at Baltimore. Nov 6, 2002.

Using a mixture model for finding informative genes in microarray studies. Dept. of Biostatistics, M. D. Anderson Cancer Center. Jan 24, 2003.

A nonparametric approach for estimating proportions of under and over expressed genes in microarray studies. Dept. of genetical epidemiology, NCI. April 8, 2003.

A semiparametric two-component mixture model and its applications in estimating malaria attributable fractions. Dept. of Statistics, Columbia University. Oct. 6, 2003.

A semiparametric two-component "compound" mixture model and its applications in estimating malaria attributable fractions. Dept. of Biostatistics, Yale University. Nov. 4, 2003.

Empirical likelihood based inference in semiparametric finite mixture models. 36th symposium on the interface: computing science and statistics. Baltimore, May 26-29, 2004.

Outcome dependent sampling, biased sampling and truncated sampling: Connections and applications in epidemiologic studies. Joint Statistical Annual Meeting in Toronto, August, 2004.

A semiparametric two-component "compound" mixture model and its applications in estimating malaria attributable fractions. Dept. of Biostatistics, University of Wisconsin. April 1, 2005.

Semiparametric inference in conditional independent latent class models. Enar, Tempe, March, 2006.

Empirical likelihood based method for estimating receiver operating characteristic curves in the presence of verification bias. Joint meeting, Seattle, August, 2006.

Empirical likelihood. Invited talk at University of Waterloo for celebrating 40th Anniversary, Waterloo, May 30 to June 1, 2007.

Length bias sampling and survival analysis. Invited talk at University of Waterloo for celebrating Professors J. Kalbfleisch and J. Lawless' achievement. May, 2010.

A new nuisance-parameter elimination method with application to the unordered homologous chromosome pairs problem. Department of Biostatistics, University of Washington. Nov. 2010.

Teaching and advising

Courses taught

Introduction of probability and statistics, biostatistics, regression analysis, survey sampling, statistical inferences, probability and measure theory.

Master degree student Rui Cai. Title of thesis "Estimation and testing in two sample density ratio models", May, 1997.

Master degree student Amy Peng. Title of thesis "An application of the two-sample density ratio model", May, 1997.

Service to the Math. Department in University of Maryland

One year policy committee. (Sep. 1996, May 1997).

Create and grade Ph.D comprehensive examinations.

One year graduate admission committee.

Working experiences

Conducted statistical analysis for cancer clinical data and infectious diseases related data, investigated various statistical methods for clinical trial designs, epidemiology and genetic studies, economic and survey sampling data.

Past Research Support

1 P30 CA08748-36 (P.I. Varmus; Biostat. Core P.I. Begg) 1/1/99 - 12/31/02 NIH/NCI Cancer Center Support Grant The Biostatistics Facility provides statistical support for long-term collaborative projects with Center Clinical and Laboratory investigators and provides short-term consulting assistance.

VO1 CA83180-2 (Berwick) 9/30/99 - 8/31/04 NIH/NCI A Model for Genetic Susceptibility: Melanoma The goal of this large international population-based case-control study is to evaluate the public health impact of genetic mutations and polymorphisms and their interaction with sun exposure, via estimation of relevant population parameters in a novel study design.

1 R21 FDA001684-2 (Trippett) 9/30/99 - 9/29/02 NIH/NCI Rebeccamycin Analog: A Phase II Study in Neuroblastoma

5 R01 CA34775-16 (Chaganti) 12/1/00 - 11/30/05 NIH/NCI Mapping Chromosomes and Genes in Relation to Leukemia the goal of the project is to identify all the breakpoint clusters and the relevant deregulated genes at the chromosomal site, 1q21-22 and investigate their biological and clinical significance.

1 R21 CA89936-1 (Cheung) 9/1/00-8/31/02 NIH/ NCI Novel Tumor Antigen for Antibody Targeting

1 R01 NS39375 (Kalderon) 6/1/01-7/31/05 NIH/NINDS Pre-Clinical Studies of Spinal Cord Injury Repair

2 PO1 CA08526-38 (PI Bertino; Biostat. Core PI Begg) 12/1/00 - 6/30/05 NIH/NCI Cancer Chemotherapy Program Project The objectives of this research program are 1) Phase I studies of new drugs and treatments, 2) Evaluation of new therapies to treat hematologic malignancies, and 3) Evaluation of new therapies to treat solid tumors. The objectives of the Biostatistics Core are to collaborate with investigators in the

design, data management, computer processing and analysis of clinical and related basic science research.

Research interests:

Empirical likelihood, case-control study, length bias sampling, cross sectional sampling, econometrics, survival analysis, missing data, causal inference, genetic mixture models, generalized linear models, survey sampling and microarray data analysis.

Statistical Methodology Publications:

Guan, Z. and Qin, J. (2015). Optimal Combination of Biomarkers for Time-dependent ROC Estimation and Related Problems. To appear in *Statistical Methods in Medical Research*.

Qin, J., Zhang, H., Li, P. F., Albanes, D. and Yu, K. (2015). Using covariate specific disease prevalence information to increase the power of case-control study. To appear in *Biometrika*.

Qin, J. and Follmann, D. (2014). Semiparametric maximum likelihood inference by using number of failed contact attempts to adjust for non-ignorable non-response. *Biometrika*, **101**, 985-991.

Liu, H., Ning, J., Shen, Y. and Qin, J. (2014). Sample Size Calculations for Prevalent Cohort Designs. To appear in *Statistical Methods in Medical Research*.

Jing Qin, Tanya P. Garcia, Yanyuan Ma, Ming-Xin Tang, Karen Marderz and Yuanjia Wang. (2014). Combining isotonic regression and EM algorithm to predict genetic risk under monotonicity constraint. *Annals of Applied Statistics*, **8**, 1182-1208.

Dean Follmann, Jing Qin, M. Lourdes Guerrero, J Gabrielle Breugelmans, Gustavo Rosales-Pedraza, Bradford D Gessner, Guillermo M. Ruiz-Palacios. (2014). Estimating the burden of pertussis in Mexican adolescents from paired serological data using a bivariate mixture model. *JRSSC*, **63**, 621-637.

Chen, B. J. and Qin, J. (2014). Test the reliability of doubly robust estimation with missing response data. *Biometrics*, **70**, 289-298.

- Chen, B. J. and Qin, J. (2014). Use empirical likelihood to calibrate auxiliary information in partly linear monotone regression models. To appear in *Statistics in Medicine*.
- Ning, J., Qin, J. and Shen, Y. (2014). Score Estimating Equations from Embedded Likelihood Functions under Accelerated Failure time. *JASA*, **109**, 1625-1635.
- Hu, Z. H., Follmann, D. A. and Qin, J. (2014) Semiparametric mixture survival model with application to MRFIT study. *Statistics and Its Interface*.
- Yuan, A. , Li, Q., Qin, J. and Zheng, G. (2014). Estimation of genetic effects incorporating prior information. *Statistics and Its Interface*, **7**, 43-50.
- Zhang, H., Qin, J., Landi, M., Caporaso, N. and Yu, K. (2013). A copula-model based semiparametric interaction test under the case-control design. *Statistica Sinica*, **23**, 1505-1522.
- Huang, C. Y. and Qin, J. (2013) Semiparametric estimation for the additive hazards model with left-truncated and right-censored data. *Biometrika*, **100**, 877-888.
- Chen, B. J. and Qin, J. (2013). A new estimation with minimum trace of asymptotic covariance matrix for incomplete longitudinal data with a surrogate process. *Statistics in Medicine*, **32**, 4763-4780.
- Leung, D., Small, D., Qin, J., and Zhu, M. (2013). Shrinkage empirical likelihood estimator in longitudinal analysis with time-dependent covariates - application to modeling the health of Filipino children. *Biometrics*, **69**, 624-632.
- Chen, S. X., Qin, J. and Tang, C. Y. (2013). Mann-Whitney test with adjustments to pre-treatment variables for missing values and observational study. *JRSSB*, **75**, 81-102.
- Ning, J., Qin, J., Asgharian, M. and Shen, Y. (2013). Empirical likelihood-based confidence intervals for length-biased data. *Stat. in Medicine*, **32**, 2278-2291.
- Liu, H., Qin, J. and Shen, Y. (2012). Imputation for semiparametric transformation models with biased-sampling data. *Lifetime Data Analysis*, **18**, 470-503.
- Diao, G. Q., Ning, J. and Qin, J. (2012). Maximum Likelihood Estimation for Semiparametric Density Ratio Model. *The International Journal of Biostatistics*. **8**, Issue 1, Article 16, ISSN (Online) 1557-4679, DOI: 10.1515/1557-4679.1372, June 2012.

- Guan, Z., Qin, J. and Zhang, B. (2012). Information borrowing methods for covariate-adjusted ROC curve. *Canadian Journal of Statistics*, **40**, 569-587. **Selected as the best paper in the Canadian Journal of Statistics 2012 volume.**
- Huang, C. Y. and Qin, J. (2012). Composite Partial Likelihood Estimation Under Length-Biased Sampling, With Application to a Prevalent Cohort Study of Dementia. *JASA*, **107**, 946-957.
- Shen, Y., Ning, J. and Qin, J. (2012). Likelihood approaches for an invariant density ratio model with biased-sampling data. *Biometrika*, **99**, 363-378.
- Hu, Z., Follmann, D. A. and Qin, J. (2012). Semiparametric double balancing score estimation for incomplete data with ignorable missingness. *JASA*, **107**, 247-257.
- Huang, C. Y., Qin, J. and Follmann, D. (2012). A maximum pseudo-profile likelihood estimator for the Cox model under length-biased sampling. *Biometrika*, **99**, 199-210.
- Li, P. F. and Qin, J. (2011). A new nuisance-parameter elimination method with application to the unordered homologous chromosome pairs problem. *JASA*, **496**, 1476-1484.
- Qin, J., Ning, J., Liu, H. and Shen, Y. (2011). Maximum Likelihood Estimations and EM Algorithms with Length-biased Data. *JASA*, **496**, 1434-1449.
- Ning, J., Qin, J. and Shen, Y. (2011). Buckley-James-type Estimator with Right-censored and Length-biased Data. *Biometrics*, **67**, 1369-1378.
- Hong Zhang, Sholom Wacholder, Jing Qin, Allan Hildesheim and Kai Yu (2011). Improved genetic association tests for an ordinal outcome representing the disease progression process. *Genetic Epidemiology*, **35**, 499-505.
- Qin, J. and Zhang, B. (2011). Optimal estimating functions in incomplete data and length biased sampling data problems. *Canadian Journal of Statistics*, **39**, 510-518.
- Hu, Z., Follmann, D. and Qin, J. (2011). Dimension reduced kernel estimation for distribution function with incomplete data. *Journal of Statistical Planning and Inference*, **141**, 3084-3093.

- Huang, C. Y. and Qin, J. (2011). Nonparametric estimation for length-biased and right-censored data, *Biometrika*, **98**, 177-186.
- Zhou, H., Song, R., Wu, Y. S and Qin, J. (2011). Statistical inference for a two-stage outcome-dependent sampling design with a continuous outcome. *Biometrics*, **67**, 194-202.
- Qin, J. and Liang, K. Y. (2011). Hypothesis testing in a mixture case-control model. *Biometrics*, **67**, 182-193.
- Qin, J. and Zhang, B. (2010). Best combination of multiple diagnostic tests for screening purposes. *Stat. in Medicine*, **29**, 2905-2919.
- Duan, X. Qin, J. and Wang, Q. H. (2010). Optimal estimation in surrogate outcome regression problems. *Canadian Journal of Statistics*, **38**, 633-646.
- Ning, J., Qin, J. and Shen, Y. (2010). Nonparametric tests for right-censored data with biased sampling. *JRSSB*, **72**, 609-630.
- Hu, Z., Follmann, D. A. and Qin, J. (2010). Semiparametric dimension reduction estimation for mean response with missing data. *Biometrika*, **97**, 305-319.
- Follmann, D. A., Qin, J. and Hoshino, Y. (2010). Estimation of viral infection and replication in cells using convolution models. *JRSSC*, **59**, 423-435.
- Qin, J. and Shen, Y. (2010). Statistical methods for analyzing right-censored length-biased data under Cox model. *Biometrics*, **66**, 382-392.
- Huang, C. Y, Qin, J. and Wang, M. C. (2010). Semiparametric analysis for recurrent event data with time dependent covariates and informative censoring. *Biometrics*, **66**, 39-49.
- Qin, J. and Zhang, B. and Leung, D. (2009). Empirical likelihood in missing data problems. *JASA*, **104**, 1492-1503.
- Cheng, J., Qin, J. and Zhang, B. (2009). Semiparametric estimation and inference for distributional and general treatment casual effects. *JRSSB*, **71**, 881-904.
- Shen, Y., Ning, J. and Qin, J. (2009). Analyzing length-biased data with semi-parametric transformation and accelerated failure time models. *JASA*, **104**, 1192-1202.
- Hu, Z., Qin, J. and Follmann, D. (2008). Semiparametric two-sample change-point model with application to HIV studies. *JRSSC*, **57**, 589-607.

- Huang, C. Y., Qin, J. and Follmann, D. (2008). Empirical Likelihood-Based Estimation of Treatment Effect in a Pretest-Posttest Study. *JASA*, **103**, 1270-1280.
- Hu, Zonghui, Follmann, Dean, Qin, Jing, Dewar, Robin, Sangweni, Phumelele. (2008). Nonparametric likelihood test for detecting discordance between two measurements and its application to viral load determination with detection limit. *Statistics in Medicine*, **27**, 4489-4501.
- Qin, J., Shao, J. and Zhang, B. (2008) Efficient and Doubly Robust Imputation for Covariate-Dependent Missing Responses. *JASA*, **103**, 797-810.
- Fokianos, K. and Qin, J. (2008). A Note on Monte Carlo Maximization by the Density Ratio Model. *Journal of Statistical Theory and Practice*, **2**, Sept.
- Chen, S. X. Leung, D. and Qin, J. (2008). Improving semiparametric estimation by using surrogate data. *JRSSB*, **70**, 803-823.
- Qin, J. and Zhang, B. (2008). Empirical likelihood-based difference-in-differences estimators. *Journal of Royal Statistical Society, Series, B*, **70**, 329-349.
- Huang, C. Y., Qin, J. and Zou, F. (2007). Empirical Likelihood-based Inference in a Genetic Mixture Model. *Canadian Journal of Statistics*, **35**, 563-574.
- Heller, G. and Qin, J. (2007) Inference on the Limiting False Discovery Rate and the P-value Threshold Parameter Assuming Weak Dependence between Gene Expression Levels within Subject. *Statistical Applications in Genetics and Molecular Biology*, **6**, Issue 1, article 14.
- Shen, Y., Qin, J. and Costantino, J. P. (2007). Inference of Tamoxifen's effects on prevention of breast cancer from a randomized controlled trial. *Journal of the American Statistical Association*, **102**, 1235-1244.
- Qin, J. and Zhang, B. (2007). Empirical likelihood-based inference in missing response problems and its application in observational studies. *JRSSB*, **69**, 101-122.
- Chen, S. X. and Qin, J. (2006). An empirical likelihood method in mixture models with incomplete classifications. *Statistica Sinica*, **16**, 1101-1116.
- Leung, D. and Qin, J. (2006). Analyzing survey data with incomplete responses using a method based on empirical likelihood. *Journal of Royal Statistical Society, Series, C*, **55**, 379-396.

- Li, G. and Qin, J. (2006). Analysis of two-sample truncated data using generalized logistic model. *Journal of Multivariate Analysis*, **97**, 675-697.
- Leung, D. and Qin, J. (2006). Semi-parametric inference in a bivariate (multivariate) mixture model. *Statistica Sinica*, **16**, 153-164.
- Qin, J. and Zhang, B. (2005). Density estimation under a two-sample semiparametric model. *Journal of Nonparametric Statistics*, **6**, 665-683.
- Qin, J. and Leung, D. (2005). A semiparametric two-component "compound" mixture model and its application to estimating malaria attributable fractions. *Biometrics*, **61**, 456-464.
- Qin, J. and Zhang, B. (2005). Marginal likelihood, conditional likelihood and empirical likelihood: connections and applications. *Biometrika*, **92**, 251-270.
- Chen, S. X., Leung, D. and Qin, J. (2003). Information recovery in a study with surrogate endpoints. *Journal of the American Statistical Association*, **98**, 1052-1062.
- Chen, S. X. and Qin, J. (2003). Empirical likelihood based confidence intervals for data with possible zero observations. *Statistics and Probability Letters*, vol **65**, 29-37.
- Qin, J. and Fokianos, K. (2003). Discussion of the paper "A theory of statistical models for Monte Carlo integration" by A. Kong, P. McCullagh, X-L, Meng, D. Nicolae, Z. Tan. *J. R. Statist. Soc. B*, **65**, 611.
- Qin, J. and Zhang, B. (2003). Using logistic regression procedures for estimating receiver operating characteristic curves. *Biometrika*, **90**, 585-596.
- Qin, J., Berwick, M., Ashbolt, R. and Dwyer, T. (2002). Quantifying the change of melanoma incidence by Breslow thickness. *Biometrics*, **58**, 665-670.
- Zhou, H., Weaver, M., Qin, J., Longnecker, M. and Wang, M. C. (2002). A semiparametric empirical likelihood method for data from an outcome dependent sampling scheme with a continuous outcome. *Biometrics*, **58**, 413-421.
- Qin, J., Leung, D. and Shao, J. (2002). Estimation with survey data under non-ignorable nonresponse or informative sampling. *Journal of the American Statistical Association*, **97**, 193-200.
- Heller, G. and Qin, J. (2001). Pairwise rank based likelihood for estimation and inference on the mixture proportion. *Biometrics*, **57**, 813-817.

- Wang, M. C., Qin, J. and Chiang, C. T. (2001). Analyzing recurrent event data with informative censoring. *Journal of the American Statistical Association*, **96**, 1057-1065.
- Qin, J. and Wang, M. C. (2001). Semiparametric analysis of truncated data. *Lifetime data analysis*, **7**, 225-242.
- Fokianos, K., Kedem, B., Qin, J. and Short, D. A. (2001). A semiparametric approach to the one-way layout. *Technometrics*, **43**, 56-65.
- Qin, J. (2000). Combining parametric and empirical likelihoods. *Biometrika*, **87**, 484-490.
- Liang, K. Y. and Qin, J. (2000). Regression analysis under non-standard situations: A pairwise pseudo-likelihood approach. *J. R. Statist. Soc. B*, **62**, 773-786.
- Qin, J. (1999). Empirical likelihood ratio based confidence intervals for mixture proportions. *Ann. of Statist.*, **27**, 1368-1384.
- Fokianos, K., Peng, A. and Qin, J. (1999). A generalized moments specification test of the link function in case-control studies. *The Canadian Journal of Statistics*, **27**, 735-750.
- Qin, J. (1998). Semiparametric likelihood based method for goodness of fit test and estimation in upgraded mixture models. *The Scandinavian Journal of Statistics*, **25**, 681-691.
- Qin, J. (1998). Inferences for case-control and semiparametric two-sample density ratio models. *Biometrika*, **85**, 619-630. **This paper has been cited around 100 times based on google web information.**
- Fokianos, K., Kedem, B., Qin, J., Haferman, J. L. and Short, D. A. (1998). On Combining instruments. *Journal of Applied Meteorology*, **37**, 220-226.
- Li, G. and Qin, J. (1998). Semiparametric likelihood based inferences for biased and truncated data when total sample size is known. *J. R. Statist. Soc. B*, **60**, 243-254.
- Qin, J. and Sun, J. (1997) A modified likelihood ratio test statistic in a semi-parametric change point model in the presence of randomly censored data. *The Canadian Journal of Statistics*, **25** 325-336.

Qin, J. and Zhang, B. (1997). A goodness of fit test for logistic regression models based on case-control data. *Biometrika*, **84**, 609-618. **This paper has been cited around 150 times based on google web information.**

Li, G., Qin, J. and Tiwari, R. C. (1997) Semiparametric likelihood ratio based inferences for truncated data. *Journal of the American Statistical Association*, **92**, 236-245.

Qin, J. and Wong, A. (1996) Empirical likelihood in a semi-parametric model. *The Scandinavian Journal of Statistics* **23** 209-219.

Qin, J. and Lawless, J. F. (1995) Estimating equations, empirical likelihood and constraints on parameters. *The Canadian Journal of Statistics*, **23** 145-159.

Qin, J. and Lawless, J. F. (1994) Empirical likelihood and general estimating equations. *Ann. of Statist.* **22**, 300-325. **This paper has been cited more than 1000 times based on google web information.**

Qin, J. (1994). Semi-empirical likelihood ratio confidence intervals for the difference of two sample means. *Ann. Inst. Statist. Math.* **46**, 117-126.

Qin, J. (1993) Empirical likelihood in biased sample problems. *Ann. of Statist.*, **21**, 1182-1196. **This paper has been cited around 100 times based on google web information.**

Chen, J. and Qin, J. (1993). Empirical likelihood method in finite population and the effective usage of auxiliary information. *Biometrika*, **80**, 107-116. **This paper has been cited around 150 times based on google web information.**

Chen, J. and Qin, J. (1991). Some results on generalized regression quantiles. *Communication in Statistics, Theory and Methods*. **20** 911-928.

Papers in proceedings of conference or chapters in books

Jammalamadaka, S. R. and Qin, J. (1995). Some results on the empirical spacings process and its bootstrapped version. *Multivat. Statist.*, Edited by E.-M. Tiit et al. 1995 VSP/TEV, page 17-33.

Health Science Application Publications:

Ian N. Moore, Elaine W. Lamirande, Myeisha Paskel, Danielle Donahue, Jing Qin, Kanta Subbarao. (2014). Severity of clinical disease and pathology in ferrets experimentally infected with influenza viruses is influenced by inoculum volume. *Journal of Virology*, **88** (23) 13879, 2341-14.

Kawsar R. Talaat, Catherine J. Luke, Surender Khurana , Jody Manischewitz, Lisa R. King Bridget A. McMahon, Ruth A. Karron , Kristen Lewis, Jing Qin, Dean Follmann, Hana Golding, Kathleen Neuzil and Kanta Subbarao (2014). A live attenuated H5N1 vaccine induces long term immunity in the absence of a primary antibody response. To appear in *The Journal of Infectious Diseases*.

Jorge A. Tavel et al. (2011). Pre-ART Levels of Inflammation and Coagulation Markers are Strong Predictors of Death in a South African Cohort with Advanced HIV Disease. To appear in *PLoS ONE*.

Anuradha Ganesan, Nancy Crum-Cianflone, Jeanette Higgins, Jing Qin, Catherine Rehm, Julia Metcalf, Carolyn Brandt, Jean Vital, Catherine Decker, Peter Sklar, Mary Bavaro, Sybil Tasker, Dean Follmann and Frank Maldarelli (2011). High Dose Atorvastatin Decreases Cellular Markers of Immune Activation without Affecting HIV-1-RNA Levels: Results of a Double-Blind Randomized Placebo Controlled Clinical Trial. *Journal of Infectious Diseases*. **203** (15 March).

Aruna Ambagala; Tammy Krogmann; Jing Qin; Lesley Pesnicak; Jeffrey I Cohen. (2010). A Varicella-Zoster Virus mutant impaired for latency in rodents, but not impaired for replication in cell culture. To appear in *Virology*.

Jeffrey Cohen, Patricia Hohman, Rachael Fulton, Siu-Ping Turk, Jing Qin, Karen Thatcher, Ronald L.Hornung. (2010). Kinetics of Serum Cytokines after Primary or Repeat Vaccination with the Smallpox Vaccine. *Journal of Infectious Diseases*, **201**, 1183-1191.

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